

**MODIFIED FACET ETCH TO PREVENT BLOWN GATE OXIDE AND
INCREASE ETCH CHAMBER LIFE**

ABSTRACT

A modified facet etch is disclosed to prevent blown gate oxide and increase etch chamber life. The modified facet etch is a two-stage process. The first stage is a plasma sputter etch to form a facet profile. The first stage etch is terminated prior to reaching the target depth for the etching process. The second stage etch is a reactive ion etch which directionally follows the facet profile to reach the target depth.